Sample Letter to Certificate Holders

U.S. Department
of Transportation

**Federal Aviation
Administration**

**Transport Airplane Directorate
Aircraft Certification Service**

1601 Lind Avenue, S.W.
Renton, Washington 98055-4056

DATE

In Reply,
Refer To: TBD

Mr. TBD.
Generic Airplane Co/STC Holder
Street Address
City, St ZIP

Dear Mr. TBD:

This letter is to make sure that you are aware of the recently issued Special Federal Aviation Requirement (SFAR) No. 88 titled “Fuel Tank System Fault Tolerance Evaluation Requirements.” The SFAR was published in the Federal Register on May 7, 2001. It was part of a fuel tank safety rulemaking package that also included amendments to parts 25, 91, 121, 125, and 129. The SFAR and other amendments became effective June 6, 2001.

The SFAR applies to "the holders of type certificates, and supplemental type certificates that may affect the airplane fuel tank system, for turbine-powered transport category airplanes, provided the type certificate was issued after January 1, 1958, and the airplane has either a maximum type certificated passenger capacity of 30 or more, or a maximum type certificated payload capacity of 7,500 pounds or more." The SFAR also applies to "applicants for type certificates, amendments to a type certificate, and supplemental type certificates affecting the fuel tank systems for those airplanes identified above, if the application was filed before the effective date of this SFAR and the certificate was not issued before the effective date" of the SFAR. The related amendments to parts 25, 91, 121, 125 and 129 incorporate the requirements of the SFAR in future applications for approval of design changes (TCs, amended TCs and STCs).

The SFAR is the first phase of this safety initiative that applies to existing designs. It requires that the affected TC and STC holders submit a report for approval to the FAA Aircraft Certification Office (ACO), or office of the Transport Airplane Directorate, having cognizance over the type certificate for the affected airplane, by December 6, 2002, or within 18 months after the issuance of a certificate for which application was filed before June 6, 2001, whichever is later. Each supplemental type certificate holder will need to make a determination as to whether their STC may affect the fuel tank system safety. The attached discussion from the preamble to the rule should assist in identifying STCs that may affect the fuel tank system. If it is determined that a report is required, it must;

(1) provide substantiation that the airplane fuel tank system design, including all necessary design changes, meets the requirements of § 25.901 and the amended § 25.981(a) and (b) (Amendment 25-102); and,
(2) contains all maintenance and inspection instructions necessary to maintain the design features required to preclude the existence or development of an ignition source within the fuel tank system throughout the operational life of the airplane.

The second phase of this safety initiative is implemented through amendments to parts 91, 121,125 and 129 that require that operators have an approved maintenance program for the actual configuration of the fuel tank system by June 7, 2004. The requirements of these maintenance programs, and any subsequent changes to the technical content, must be approved by the cognizant ACO or cognizant office of the Transport Airplane Directorate.

In order to meet the SFAR compliance date of December 6, 2002, the FAA recommends that all affected certificate holders begin working immediately on the design review required by the SFAR. Certificate holders should work closely with operators of their products when developing the recommended maintenance and inspection instructions that are to be submitted as part of the report required by the SFAR. Also, the certificate holders and the cognizant ACOs should work closely throughout the design review process to avoid last minute compliance issues from surfacing when the report is submitted for approval.

In order to provide consistent and timely support for certificate holders during the SFAR review, the FAA Transport Standards Staff and the Aircraft Certification Offices (ACOs) are developing a system to track the progress of the certificate holders and to coordinate resolution of any issues that arise in meeting the requirements of the SFAR. To implement this system effectively, we need for each affected TC and STC holder to identify a point of contact with whom the ACO can communicate. Therefore, if you determine that you may be subject to the requirements of the SFAR, you are requested to supply the [insert ACO name] ACO with a name and phone number of a person assigned to coordinate these issues with the ACO. Please supply this contact information by_____.

[Note: Include the following paragraph only in letters to foreign certificate holders:]
Reports from foreign TC and STC holders are expected to be submitted via your foreign civil aviation authority (CAA). The FAA anticipates that the required compliance findings can be conducted under agreed bilateral validation procedures, including validation procedures relating to the handling of regulatory differences. The FAA will be in contact with your CAA in the near future to discuss the application of this process to SFAR 88.

If you have any questions regarding this memorandum, contact_____-, who will be acting as the ACO's contact point on these issues.

Sincerely,

Manager, TBD Aircraft Certification Office

Attachment

Applicability of SFAR to Supplemental Type Certificate (STC) Holders

The SFAR applies to STC holders as well, because a significant number of STC's effect changes to fuel tank systems, and the objectives of this rule would not be achieved unless these systems are also reviewed and their safety ensured. The service experience noted in the background of this rule indicates modifications to airplane fuel tank systems incorporated by STC's may affect the safety of the fuel tank system.

Modifications that could affect the fuel tank system include those that could result in an ignition source in the fuel tank. Examples include installation of auxiliary fuel tanks and installation of, or modification to, other systems such as the fuel quantity indication system, the fuel pump system (including electrical power supply), airplane refueling system, any electrical wiring routed within or adjacent to the fuel tank, and fuel level sensors or float switches. Modifications to systems or components located outside the fuel tank system may also affect fuel tank safety. For example, installation of electrical wiring for other systems that was inappropriately routed with FQIS wiring could violate the wiring separation requirements of the type design. Therefore, the FAA intends that a fuel tank system safety review be conducted for any modification to the airplane that may affect the safety of the fuel tank system. The level of evaluation that is intended would be dependent upon the type of modification. In most cases a simple qualitative evaluation of the modification in relation to the fuel tank system, and a statement that the change has no effect on the fuel tank system, would be all that is necessary. In other cases where the initial qualitative assessment shows that the modification may affect the fuel tank system, a more detailed safety review would be required.

Design approvals for modification of airplane fuel tank systems approved by STC's require the applicant to have knowledge of the airplane fuel tank system in which the modification is installed. The majority of these approvals are held by the original airframe manufacturers or airplane modifiers that specialize in fuel tank system modifications, such as installation of auxiliary fuel tanks. Therefore, the FAA expects that the data needed to complete the required safety review identified in the SFAR would be available to the STC holder.